



Pseudoscience...

What science communicators need to know

Questions we'll answer...

- What is pseudoscience?
- What makes it different than “real” science?
- How prevalent are pseudoscience ideas?
- What’s the relationship between pseudoscience and science?
- Why is knowing about pseudoscience important to science communicators?
- What are some common examples of pseudoscience?



Defining pseudoscience...

- ...an activity resembling science but based on fallacious assumptions...”
- “Pseudoscience is a claim, belief, or practice which is presented as scientific, but which does not adhere to a valid scientific methodology, lacks supporting evidence or plausibility, cannot be reliably tested, or otherwise lacks scientific status.”



Characteristics of pseudoscience...

The idea is dogmatic.

The idea is aimed directly at the public

Verbose language and lots of jargon

Use of vague, exaggerated or untestable claims

Confirmational bias (selective evidence)

Anecdotes presented as evidence

Contention that it cannot be tested scientifically

No clear explanations of mechanisms



Why pseudoscience seems to be experiencing an upswing...

- The information explosion
- Low levels of scientific literacy
- Vulnerability of publics
- Mistrust of the scientific establishment
- The human need to reduce cognitive dissonance



Celebrities and pseudoscience

- The “ten most wanted” (part 1)
- The “ten most wanted” (part 2)



Examples of pseudoscience

